

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A firing mechanism for a semi-automatic pistol having a frame, a slide reciprocally mounted on the frame, a barrel, a firing pin and a trigger, said firing mechanism comprising:

a housing mounted within the frame of the pistol;

a pivot arm assembly located within said housing, said pivot arm assembly having a pivot arm frame with laterally spaced side walls, an upper portion, a lower portion and an inner cavity disposed between said pivot arm frame side walls, said lower portion of the pivot arm frame being pivotally attached to said housing such that said pivot arm frame may selectively pivot about a pivot point in a substantially arcuate path between a forward position and a rearward position relative to the front and rear of the pistol, the pivot arm assembly also having a sear pivotally attached to the upper portion of said pivot arm frame, said sear selectively pivoting about a pivot point in a substantially arcuate path between a first position and a second position, and a spring mechanism operatively connected to said sear exerting a biasing force on the sear urging the sear toward said first position; and

~~wherein said sear pivot point cannot be displaced upward or downward, relative to the top and bottom of the pistol, independent of the arcuate path of the pivot arm frame.~~

wherein the pivoting movement of said sear and pivot arm frame about their substantially arcuate paths does not result in said sear being displaced upward or downward, relative to the top and bottom of said pistol, in a substantially linear path.

2. (Original) The firing mechanism of claim 1 wherein said sear has adjacent first and second surfaces and a control edge that abuttingly engages the leg of the firing pin.

3. (Original) The firing mechanism of claim 2 wherein said first surface is at a first angle relative to a longitudinal axis of the sear and said second surface is at a second angle relative to a longitudinal axis of the sear, said first angle being greater than said second angle.

4. (Previously Presented) A firing mechanism for a semi-automatic pistol having a frame, a slide reciprocally mounted on the frame, a barrel, a firing pin and a trigger, said firing mechanism comprising:

 a housing mounted within the frame of the pistol;

 a pivot arm assembly located within said housing, said pivot arm assembly having a pivot arm frame with laterally spaced side walls, an upper portion, a lower portion and an inner cavity disposed between said pivot arm frame side walls, said lower portion of the pivot arm frame being pivotally attached to said housing such that said pivot arm frame may selectively pivot about a pivot point in a substantially arcuate path between a forward position and a rearward position relative to the front and rear of the pistol, the pivot arm assembly also having a sear pivotally attached to the upper portion of said pivot arm frame, said sear selectively pivoting about a pivot point in a substantially arcuate path between a first position and a second position, an actuation rod located in the inner cavity of the pivot arm frame, said actuation rod contacting a bottom surface of the sear and a spring mechanism operatively connected to said sear exerting a biasing force on the sear urging the sear toward said first position.

5. (Previously Presented) A firing mechanism for a semi-automatic pistol having a frame, a slide reciprocally mounted on the frame, a barrel, a firing pin and a trigger, said firing mechanism comprising:

 a housing mounted within the frame of the pistol;

 a pivot arm assembly located within said housing, said pivot arm assembly having a pivot arm frame with laterally spaced side walls, an upper portion, a lower portion and an inner cavity disposed between said pivot arm frame side walls, said lower portion of the pivot arm frame being pivotally attached to said housing such that said pivot arm frame may selectively pivot about a pivot point in a substantially arcuate path between a forward position and a rearward position relative to the front and rear of the pistol, the pivot arm assembly also having a sear pivotally attached to the upper

portion of said pivot arm frame, said sear selectively pivoting about a pivot point in a substantially arcuate path between a first position and a second position, an actuation rod located in the inner cavity of the pivot arm frame, said actuation rod contacting a bottom surface of the sear, a spring mechanism operatively connected to said sear exerting a biasing force on the sear urging the sear toward said first position, and said spring mechanism includes a spring having a loop portion and two legs, one leg engages the housing and urges the pivot arm frame toward its forward position and opposes the direction of the trigger pull, the other leg biases the actuation rod against the sear urging the sear toward its first position.

6. (Original) The firing mechanism of claim 1 wherein said housing includes a stop disposed between the side walls to limit the arcuate pivoting movement of the pivot arm frame.

7. (Original) The firing mechanism of claim 1 wherein said pivot arm frame includes a stop to limit the arcuate pivoting movement of the sear.

8. (Currently Amended) A firing mechanism for a semi-automatic pistol having a frame, a slide reciprocally mounted on the frame, a barrel, a firing pin and a trigger, said firing mechanism comprising:

a housing mounted within the frame of the pistol;

a pivot arm assembly located within said housing which may be removed from said housing, said assembly including a pivot arm frame having laterally spaced side walls, an upper portion, a lower portion and an inner cavity disposed between said side walls, said lower portion of the pivot arm frame being pivotally attached to said housing such that said pivot arm frame may selectively pivot in a substantially arcuate path between a forward position and a rearward position relative to the front and rear of the pistol, the pivot arm assembly also includes a sear attached to the upper portion of said pivot arm frame, said sear having adjacent first and second surfaces and a control edge that abuttingly engages the leg of the firing pin, said first surface is at a first angle relative to a longitudinal axis of the sear and said second surface is at a second angle relative to the longitudinal axis of the sear, said first angle being greater

than said second angle, and the assembly further includes a spring mechanism operatively connected to said sear exerting a biasing force on the sear; and

~~wherein said sear pivot point cannot be displaced upward or downward, relative to the top and bottom of the pistol, independent of the arcuate path of the pivot arm frame.~~

wherein the pivoting movement of said sear and pivot arm frame about their substantially arcuate paths does not result in said sear being displaced upward or downward, relative to the top and bottom of said pistol, in a substantially linear path.

9. (Original) The firing mechanism of claim 8 wherein said sear is pivotally attached to the upper portion of said pivot arm frame, said sear selectively pivoting about a pivot point in a substantially arcuate path between a first position and a second position.

10. (Previously Presented) A firing mechanism for a semi-automatic pistol having a frame, a slide reciprocally mounted on the frame, a barrel, a firing pin and a trigger, said firing mechanism comprising:

a housing mounted within the frame of the pistol;
a pivot arm assembly located within said housing which may be removed from said housing, said assembly including a pivot arm frame having laterally spaced side walls, an upper portion, a lower portion and an inner cavity disposed between said side walls, said lower portion of the pivot arm frame being pivotally attached to said housing such that said pivot arm frame may selectively pivot in a substantially arcuate path between a forward position and a rearward position relative to the front and rear of the pistol, the pivot arm assembly also includes a sear attached to the upper portion of said pivot arm frame, said sear having adjacent first and second surfaces and a control edge that abuttingly engages the leg of the firing pin, said first surface is at a first angle relative to a longitudinal axis of the sear and said second surface is at a second angle relative to the longitudinal axis of the sear, said first angle being greater than said second angle, an actuation rod located in the inner cavity of the pivot arm frame, said actuation rod contacting a bottom surface of the sear and the assembly further includes a spring mechanism operatively connected to said sear exerting a biasing force on the sear.

11. (Previously Presented) A firing mechanism for a semi-automatic pistol having a frame, a slide reciprocally mounted on the frame, a barrel, a firing pin and a trigger, said firing mechanism comprising:

a housing mounted within the frame of the pistol; a pivot arm assembly located within said housing which may be removed from said housing, said assembly including a pivot arm frame having laterally spaced side walls, an upper portion, a lower portion and an inner cavity disposed between said side walls, said lower portion of the pivot arm frame being pivotally attached to said housing such that said pivot arm frame may selectively pivot in a substantially arcuate path between a forward position and a rearward position relative to the front and rear of the pistol, the pivot arm assembly also includes a sear attached to the upper portion of said pivot arm frame, said sear having adjacent first and second surfaces and a control edge that abuttingly engages the leg of the firing pin, said first surface is at a first angle relative to a longitudinal axis of the sear and said second surface is at a second angle relative to the longitudinal axis of the sear, said first angle being greater than said second angle, an actuation rod located in the inner cavity of the pivot arm frame, said actuation rod contacting a bottom surface of the sear and the assembly further includes a spring mechanism operatively connected to said sear exerting a biasing force on the sear, said spring mechanism includes a spring having a loop portion and two legs, one leg engages the housing and urges the pivot arm frame toward its forward position and opposes the direction of the trigger pull, the other leg biases the actuation rod against the sear urging the sear toward its first position.

12. (Original) The firing mechanism of claim 8 wherein said housing includes a stop disposed between the side walls to limit the arcuate pivoting movement of the pivot arm frame.

13. (Original) The firing mechanism of claim 8 wherein said pivot arm frame includes a stop to limit the arcuate pivoting movement of the sear.

14. (Previously Presented) A semi-automatic pistol comprising:

- a frame;
- a barrel mounted on the frame;
- a slide reciprocally mounted on the frame;
- a trigger;
- a firing pin; and

a firing mechanism, said firing mechanism comprising a stationary housing mounted within the frame of the pistol, a pivot arm assembly located within said housing, the pivot arm assembly having a pivot arm frame with laterally spaced side walls, an upper portion, a lower portion and an inner cavity disposed between said side walls, said lower portion of the pivot arm frame being pivotally attached to said housing such that said pivot arm frame may selectively pivot about a pivot point in a substantially arcuate path between a forward position and a rearward position relative to the front and rear of the pistol, a sear pivotally attached to the upper portion of said pivot arm frame, said sear selectively pivoting about a pivot point in a substantially arcuate path between a first position and a second position, and a spring mechanism operatively connected to said sear exerting a biasing force on the sear holding the sear in said first position; and

wherein said sear pivot point cannot be displaced upward or downward relative to the top and bottom of the pistol, independent of the arcuate path of the pivot arm frame, and wherein the arcuate path of said sear is not guided by a cam surface.

15. (Original) The semi-automatic pistol of claim 14 wherein said sear has adjacent first and second surfaces and a control edge that abuttingly engages the leg of the firing pin, said first surface is at a first angle relative to a longitudinal axis of the sear and said second surface is at a second angle relative to the longitudinal axis of the sear, said first angle being greater than said second angle.

16. (Previously Presented) A semi-automatic pistol comprising:

- a frame;
- a barrel mounted on the frame;
- a slide reciprocally mounted on the frame;
- a trigger;
- a firing pin; and

a firing mechanism, said firing mechanism comprising a stationary housing mounted within the frame of the pistol, a pivot arm assembly located within said housing, the pivot arm assembly having a pivot arm frame with laterally spaced side walls, an upper portion, a lower portion and an inner cavity disposed between said side walls, said lower portion of the pivot arm frame being pivotally attached to said housing such that said pivot arm frame may selectively pivot about a pivot point in a substantially arcuate path between a forward position and a rearward position relative to the front and rear of the pistol, a sear pivotally attached to the upper portion of said pivot arm frame, said sear selectively pivoting about a pivot point in a substantially arcuate path between a first position and a second position, an actuation rod located within the pivot arm frame, said actuation rod contacting a bottom surface of the sear and a spring mechanism operatively connected to said sear exerting a biasing force on the sear holding the sear in said first position.

17. (Previously Presented) A semi-automatic pistol comprising:

- a frame;
- a barrel mounted on the frame;
- a slide reciprocally mounted on the frame;
- a trigger;
- a firing pin; and

a firing mechanism, said firing mechanism comprising a stationary housing mounted within the frame of the pistol, a pivot arm assembly located within said housing, the pivot arm assembly having a pivot arm frame with laterally spaced side walls, an upper portion, a lower portion and an inner cavity disposed between said side walls, said lower portion of the pivot arm frame being pivotally attached to said housing such that said pivot arm frame may selectively pivot about a pivot point in a substantially arcuate path between a forward position and a rearward position relative to the front and rear

of the pistol, a sear pivotally attached to the upper portion of said pivot arm frame, said sear selectively pivoting about a pivot point in a substantially arcuate path between a first position and a second position, an actuation rod located within the pivot arm frame, said actuation rod contacting a bottom surface of the sear and a spring mechanism operatively connected to said sear exerting a biasing force on the sear holding the sear in said first position, said spring mechanism includes a spring having a loop portion and two legs, one leg engages the housing and urges the pivot arm frame toward its forward position and opposes the direction of the trigger pull, the other leg biases the actuation rod against the sear urging the sear toward its first position.

18. (Currently Amended) A semi-automatic pistol comprising:

- a frame;
- a barrel mounted on the frame;
- a slide reciprocally mounted on the frame;
- a trigger;
- a firing pin; and

a firing mechanism, said firing mechanism comprising a housing mounted within the frame of the pistol, a pivot arm assembly located within said housing, the pivot arm assembly having a pivot arm frame with laterally spaced side walls, an upper portion, a lower portion and an inner cavity disposed between said side walls, said lower portion of the pivot arm frame being pivotally attached to said housing such that said pivot arm frame may selectively pivot about a pivot point in a substantially arcuate path between a forward position and a rearward position relative to the front and rear of the pistol, a sear attached to the upper portion of said pivot arm frame, said sear having adjacent first and second surfaces and a control edge that abuttingly engages the leg of the firing pin, said first surface is at a first angle relative to a longitudinal axis of the sear and said second surface is at a second angle relative to the longitudinal axis of the sear, said first angle being greater than said second angle, and a spring mechanism operatively connected to said sear exerting a biasing force on the sear; and

~~wherein said sear pivot point cannot be displaced upward or downward, relative to the top and bottom of the pistol, independent of the arcuate path of the pivot arm frame.~~

wherein the pivoting movement of said sear and pivot arm frame about their substantially arcuate paths does not result in said sear being displaced upward or downward, relative to the top and bottom of said pistol, in a substantially linear path.

19. (Original) The semi-automatic pistol of claim 18 wherein said sear is pivotally attached to the upper portion of said pivot arm frame, said sear selectively pivoting about a pivot point in a substantially arcuate path between a first position and a second position.

20. (Previously Presented) A semi-automatic pistol comprising:

- a frame;
- a barrel mounted on the frame;
- a slide reciprocally mounted on the frame;
- a trigger;
- a firing pin; and

a firing mechanism, said firing mechanism comprising a housing mounted within the frame of the pistol, a pivot arm assembly located within said housing, the pivot arm assembly having a pivot arm frame with laterally spaced side walls, an upper portion, a lower portion and an inner cavity disposed between said side walls, said lower portion of the pivot arm frame being pivotally attached to said housing such that said pivot arm frame may selectively pivot about a pivot point in a substantially arcuate path between a forward position and a rearward position relative to the front and rear of the pistol, a sear attached to the upper portion of said pivot arm frame, said sear having adjacent first and second surfaces and a control edge that abuttingly engages the leg of the firing pin, said first surface is at a first angle relative to a longitudinal axis of the sear and said second surface is at a second angle relative to the longitudinal axis of the sear, said first angle being greater than said second angle, a spring mechanism operatively connected to said sear exerting a biasing force on the sear, and an actuation rod located within the pivot arm frame, said actuation rod contacting a bottom surface of the sear and the spring, said spring having a loop portion and two legs, one leg engaging the housing and urging the pivot arm frame toward its forward position and opposing the direction of the trigger pull, the other leg biasing the actuation rod against the sear urging the sear toward its first position.